No. 845,379. PATENTED FEB. 26, 1907.

O. THOMAS & G. BLACKWELL.

SCREW FED MACHINE.

APPLICATION FILED OCT. 26, 1906.

2 SHEETS—SHEET 1.

Fig. 1.

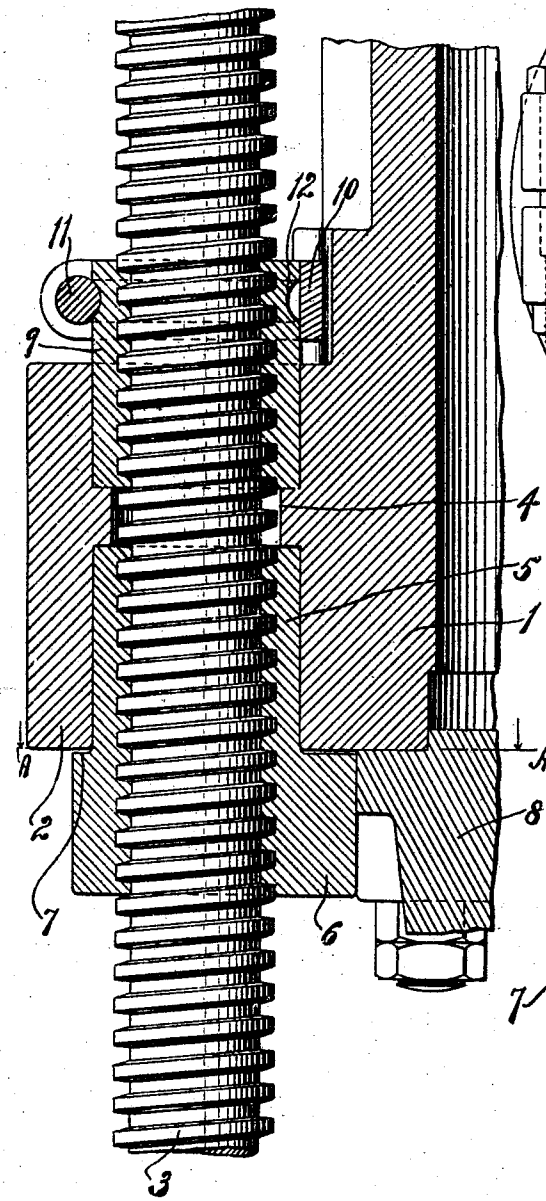


Fig. 2.

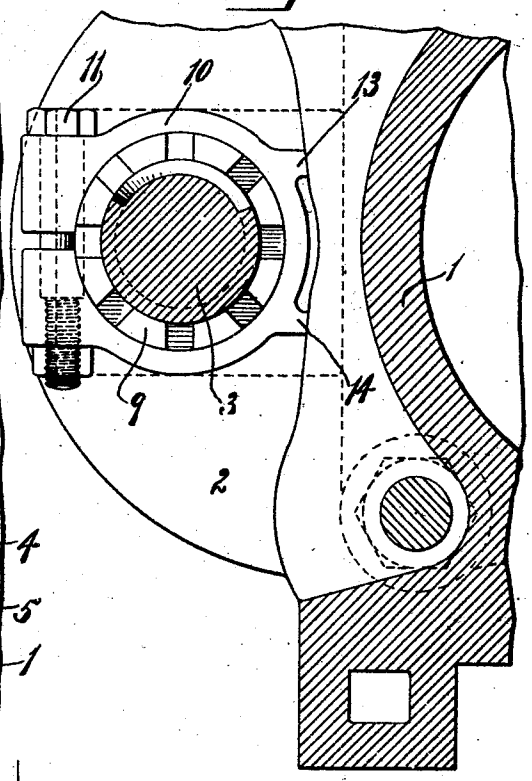
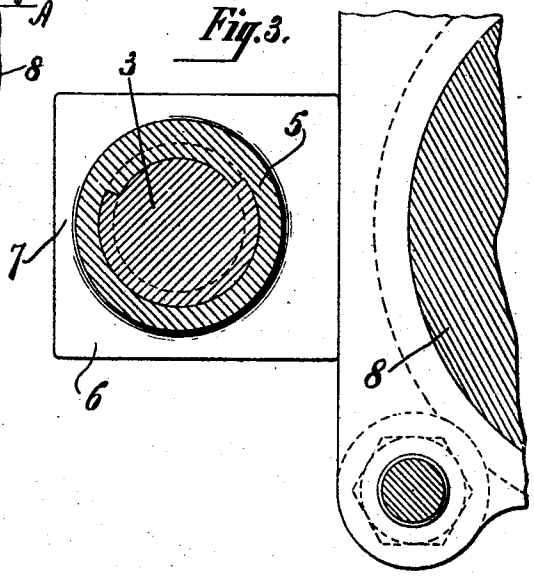


Fig. 3.



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2 SHEETS—SHEET 2.

Fig. 4.

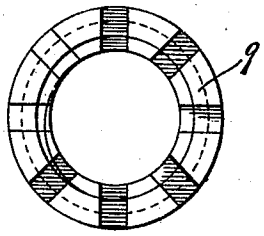


Fig. 6.

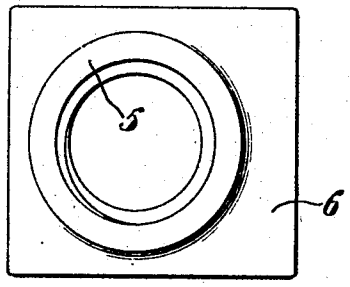


Fig. 5.

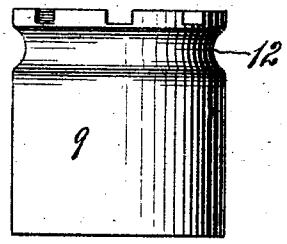


Fig. 7.

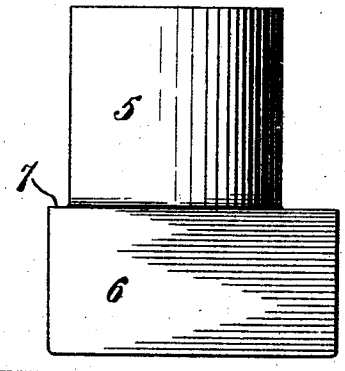


Fig. 8.

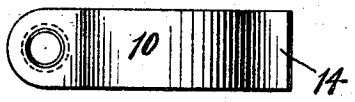
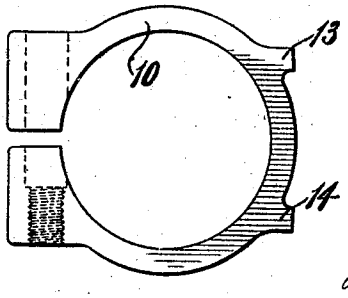


Fig. 9.



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UNITED STATES PATENT OFFICE.

OMER THOMAS, OF BEDFORD, AND GRANT BLACKWELL, OF GUTHRIE, INDIANA, ASSIGNORS TO INGERSOLL-RAND COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW JERSEY.

SCREW-FED MACHINE.

No. 845,379. Specification of Letters Patent. Patented Feb. 26, 1907.

Application filed October 26, 1906. Serial No. 340,726.

To all whom it may concern:

Be it known that we, OMER THOMAS and GRANT BLACKWELL, citizens of the United States, the former a resident of Bedford, in the county of Lawrence and State of Indiana, and the latter a resident of Guthrie, in the county of Lawrence and State of Indiana, have invented new and useful Improvements in Screw-Fed Machines, of which the following is a specification.

This invention relates to certain improvements in screw-fed machines, and is particularly intended for use in connection with the means for mounting a track-channeler cylinder on its feed-screw, so that the weight of the cylinder may be divided between upper and lower feed-nuts, one of the nuts being stationary and the other nut adjustable, combined with means for clamping the adjustable nut against movement with respect to the cylinder.

A practical embodiment of our invention is represented in the accompanying drawings, in which—

Figure 1 represents a portion of the feed-screw in side elevation and a portion of the cylinder and its means for mounting the cylinder on the screw shown in section. Fig. 2 is a top plan view of the parts shown in Fig. 1. Fig. 3 is a transverse section taken in the plane of the line A A of Fig. 1 looking in the direction of the arrows. Figs. 4 and 5 are top plan and side views of the adjustable upper nut. Figs. 6 and 7 are top plan and side views of the lower stationary nut, and Figs. 8 and 9 are side and top plan views of the jam-nut.

The cylinder is denoted by 1, and it is provided with the usual lug 2, through the bore of which the feed-screw 3 extends. This lug 2 is provided with an annular shoulder 4 in its bore.

The stationary lower nut is provided with a shank 5 and a head 6, which forms a shoulder 7. The shank 5 of the lower nut extends upwardly within the bore of the lug 2 until its top engages the annular shoulder 4 or until the shoulder 7 on the head of the nut engages the bottom of the lug, as may be desired. In the present instance the cylinder is shown as being supported on the lower nut by the engagement of the shank with the shoulder 4. This nut is held against turning by the engagement of one side of its head with the back of the cylinder, in the present instance the back of the lower cylinder-head 8, as clearly shown in Figs. 1 and 3.

The adjustable upper nut is denoted by 9, and it is turned down on the screw 3 until its lower end abuts against the shoulder 4 on the lug 2. This adjustable nut 9 is provided with a split clamp 10, the tightening-bolt 11 of which passes through the free ends of the clamp and also enters a circumferential groove 12 in the outer wall of the adjustable nut 9 above the lug 2. This clamp is held against rotary movement by engagement with the back of the cylinder, in the present instance by providing the clamp with two lugs 13 14 in use after the lug 2 has been inserted over the screw into engagement with the shoulder 7 on the lower nut. The upper nut is screwed down until its lower end engages the shoulder 4 in the bore of the lug 2. The split clamp is then tightened on the nut 9 by means of the bolt 11, thus locking the adjustable nut against movement with respect to the cylinder.

When it is desired to adjust the parts for wear, the clamp 10 may be loosened and the adjustable nut 9 screwed down to the proper point and the clamp again tightened.

It is evident that various changes might be made in the construction, form, and arrangement of the several parts and that the device may be used in other places than in connection with a channeler-cylinder. Hence we do not wish to limit ourselves strictly to the construction herein set forth; but

What we claim is—

1. A screw, a stationary nut, an adjustable nut, a part supported between the nuts and means for locking the adjustable nut against movement with respect to the said part.

2. A screw, a stationary lower nut, an adjustable upper nut, a part supported between the nuts and means for locking the adjustable upper nut against movement with respect to the said part.

3. A screw, a stationary nut, an adjustable nut, a part supported between the nuts and a split clamp embracing the adjustable nut and engaging the said part for locking the upper nut against movement with respect to the said part.

4. A screw, a stationary lower nut, an ad-

justable upper nut, a part supported between the nuts and a split clamp embracing the adjustable upper nut and engaging the said part for locking the adjustable upper nut against movement with respect to the said part.

5. A screw, a stationary lower nut, an adjustable upper nut and a part supported on the lower nut and having a shoulder engaged by the adjustable upper nut.

6. A screw, a stationary lower nut, an adjustable upper nut and a part supported on the lower nut and having a shoulder engaged by the adjustable upper nut, and means for locking the adjustable upper nut against movement with respect to said part.

7. A screw, a stationary lower nut, an adjustable upper nut and a part supported on the lower nut and having a shoulder engaged by the adjustable upper nut, and a split clamp embracing the adjustable upper nut and engaging said part for locking the adjustable upper nut against movement with respect to the said part.

8. A screw, a stationary lower nut, a part having a bore through which the screw extends, said part being supported on the lower nut, an adjustable nut and an annular shoulder within said bore engaged by the adjustable upper nut.

9. A screw, a stationary lower nut, a part having a bore through which the screw extends, said part being supported on the lower nut, an adjustable upper nut, an annular shoulder within said bore engaged by the adjustable upper nut, and means for locking the adjustable upper nut against movement with respect to said part.

10. A screw, a stationary lower nut, a part having a bore through which the screw extends, said part being supported on the lower nut, an adjustable nut, an annular shoulder within said bore engaged by the adjustable upper nut, and a split clamp embracing the adjustable upper nut and engaging the said part for locking the adjustable upper nut against movement with respect to said part.

In testimony that we claim the foregoing as our invention we have signed our names, in presence of two witnesses, this 9th day of October, 1906.

OMER THOMAS.
GRANT BLACKWELL.

Witnesses:
FRED BOWEN,
C. W. GOBAT.